Appendix I. Kings Beach Commercial
Core Improvement Project
Preliminary Delineation of
Wetlands and Other Waters of
the United States and USACE
Verification Letter

Kings Beach Commercial Core Improvement Project



Preliminary Delineation of Wetlands and Other Waters of the United States

Placer County, California 03-PLA-28 KP 14.79/16.53 (PM 9.19/10.27) EA 03-198-0C9300



November 2006





Table of Contents

	Page
Table of Contents	i
List of Tables and Figures	ii
List of Abbreviated Terms	
1. Summary	
1.1. Contact Information	
2. Site Description and Location	2
2.1. Precipitation and Growing Season	2
2.2. Vegetation	2
2.3. Ruderal Areas	3
2.4. Surface Hydrology	3
2.5. Soils	3
3. Methods	4
4. Results	5
4.1. Wetlands	5
4.2. Other Waters of the United States	6
5. References Cited	7
Exhibit A Preliminary Delineation of Wetlands and Other Waters of the United Sta	ates
Appendix A Data Sheets	
Appendix B Species List	
Appendix C Representative Photographs	

List of Tables and Figures

		Page
Table 1	Project Site Parcels	follows 2
Table 2	Soil Map Units in the Project Area	4
Table 3	Wetlands and Other Waters of the United States Found in the Delineation Study Area	
		Follows Page
Figure 1	Project Location	
Figure 2	Soil Survey Map	8

List of Abbreviated Terms

U.S. Army Corps of Engineers Clean Water Act Corps

CWA

GPS global positioning system

OHWM ordinary high water mark

SR State Route

USGS U.S. Geological Survey

Preliminary Delineation of Wetlands and Other Waters of the United States

1. Summary

This report presents the results of a delineation of wetlands and other waters of the United States conducted for the Kings Beach Commercial Core Improvement Project study area in Kings Beach, California. On September 19 and 20, 2006, a Jones & Stokes botanist/wetland ecologist and a soil scientist delineated wetlands and other waters of the United States in the delineation study area to assist the Placer County Department of Public Works in determining the location and extent of areas that likely would be subject to regulation by the U.S. Army Corps of Engineers (Corps) under Section 404 of the Clean Water Act (CWA). The delineation was conducted in accordance with the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987) and in compliance with the Sacramento District of the Corps' Minimum Standards for Acceptance of Preliminary Wetland Delineations (U.S. Army Corps of Engineers 2001). A total of 0.329 acre of jurisdictional wetlands and 0.390 acre of other waters of the United States were delineated, for a grand total of 0.719 acre of waters of the United States in the delineation study area. Eleven intermittent drainage ditches were observed within the delineation study area but were interpreted to be outside the scope of Corps jurisdiction under Section 404 because they appear to have been excavated in uplands for the purpose of drainage and do not appear to have replaced any previously existing natural stream features. All jurisdictional boundaries and determinations presented in this report are preliminary and subject to verification by the Corps' Sacramento District.

1.1. Contact Information

Project Proponent

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Delineator

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Contact: Scott Frazier (ext. 3110)

2. Site Description and Location

The delineation study area is located in eastern Placer County on the north shore of Lake Tahoe (Figure 1). It encompasses approximately 74.78 acres of residential and commercial parcels located adjacent to State Route (SR) 28 in Kings Beach (Figure 1). A list of the parcels in the study area is provided in Table 1.

The study area appears on the U.S. Geological Survey (USGS) 7.5-minute Kings Beach quadrangle in the SE ¼ of Section 13, Township 16 North, Range 17 East, and portions of the West ½ of Section 19, Township 16 North, Range 18 East, Mount Diablo Base and Meridian (Figure 1). The latitude and longitude for the approximate center of the project site are 39°14′00″ north and 120°01′00″ west. Slope gradients at the project site generally range from 0% to 5%, and elevations range from approximately 6,250 to 6,400 feet above mean sea level. To reach the project site from Sacramento, travel east on Interstate 80 and take SR 267 south to its junction with SR 28.

2.1. Precipitation and Growing Season

The closest National Weather Service cooperative weather station to the study area is located approximately 7.5 miles southwest of the delineation study area at an elevation of 6,350 feet above mean sea level (Western Regional Climate Center 2006) (Figure 1). Climate data from this weather station are presented here as a reasonable approximation of the temperature, precipitation, and growing season length for the delineation study area.

The mean annual precipitation is 31.88 inches, the mean annual maximum temperature is 56.1°F, and the mean annual minimum temperature is 30.6°F (Western Regional Climate Center 2006). The length of the growing season (based on 28° air temperature thresholds at a frequency of five years in 10) is approximately 130 days and typically extends from late May to early October in most years (Western Regional Climate Center 2006).

2.2. Vegetation

The delineation study area consists primarily of ponderosa pine woodland and residential and commercial developments but also contains a riparian woodland corridor along Griff Creek and ruderal areas. These communities are described below.

Ponderosa Pine Woodland

Ponderosa pine woodland occurs in the majority of the study area amid residential and commercial development. This plant community is characterized by an overstory composed mainly of ponderosa pine with lesser amounts of Jeffrey pine, incense cedar, and white fir. The shrub understory consists of manzanita and mountain rose. The herbaceous layer is composed of a mixture of grasses and forbs, including squirreltail, thickspike wheatgrass, small oniongrass, common tansy, and Eaton's aster.

Riparian Woodland

The riparian woodland community that occurs in the delineation study area exists adjacent to Griff Creek and is characterized by an overstory of mountain alder, black cottonwood, and Pacific willow. Yellow willow, American dogwood, and thimbleberry comprise the shrub

Table 1. Project Site Parcels

Page 1 of 5

Placer County Assessor's Parcel Number	Area within Delineation Study Area (Acres)
090-064-001	0.29
090-064-012	0.22
090-064-013	0.15
090-064-026	0.14
090-064-027	0.29
090-067-013	0.14
090-067-014	0.14
090-067-022	0.07
090-067-023	0.07
090-067-026	0.14
090-067-029	0.18
090-071-001	0.14
090-071-002	0.14
090-071-003	0.22
090-071-005	0.16
090-071-008	0.16
090-071-017	0.29
090-071-018	0.09
090-071-019	0.09
090-071-019	0.19
090-071-021	0.09
090-071-023	0.41
090-071-025	0.07
090-071-026	0.12
090-071-028	0.28
090-071-029	0.30
090-071-030	0.55
090-071-030	0.13
090-071-033	0.13
090-071-033	0.35
090-071-034	0.07
090-072-002	0.18
090-072-002	0.18
090-072-003	0.06
090-072-006	0.24
090-072-009	0.18
090-072-009	0.08
090-072-010	0.00
090-072-018	0.03
090-072-019	0.06
090-072-013	0.05
090-072-024	0.09
090-072-024	0.43
090-072-020	0.43
090-072-027	0.29
090-072-028	0.43
090-072-029	0.29
090-072-030	0.33
090-074-001	0.14
090-074-002	0.86
090-074-004	0.14
090-074-006	0.07
090-074-006	0.07
090-074-008	0.22
090-074-009	0.29
090-074-010	0.07
090-074-012	0.07
090-074-013	0.14
090-074-014	0.07

Table 1. Continued

Page 2 of 5

Placer County Assessor's Parcel Number	Area within Delineation Study Area (Acres)
090-074-018	0.29
090-074-020	0.94
090-074-021	0.04
090-074-022	0.04
090-075-001	0.03
090-075-002	0.06
090-075-009	0.07
090-075-010	0.06
090-075-014	0.39
090-075-016	0.14
090-075-017	0.24
090-075-018	0.17
090-075-019	0.11
090-075-020	0.11
090-075-025	0.21
090-080-001	0.20
090-080-002	0.20
090-080-002	0.21
090-080-005 090-080-006	0.12
	0.28
090-080-007	0.62
090-080-009	0.82
090-080-017	0.95
090-080-018	0.62
090-080-022	0.36
090-080-023	0.66
090-121-010	0.29
090-121-011	0.29
090-121-013	0.14
090-121-016	0.43
090-121-017	0.14
090-121-019	0.22
090-121-023	0.58
090-121-026	0.07
090-122-001	0.43
090-122-002	0.37
090-122-004	0.15
090-122-005	0.20
090-122-010	0.09
090-122-014	0.15
090-122-017	0.18
090-122-019	0.29
090-122-021	0.31
090-122-022	0.14
090-122-023	0.21
090-122-024	0.21
090-122-025	0.14
090-122-026	0.14
090-122-020	0.14
090-122-027	0.14
	0.14
090-122-030	
090-122-031	0.36
090-122-033	0.11
090-122-034	0.10
090-122-035	0.06
090-122-036	0.09
090-123-001	0.23
090-123-006	0.66

Table 1. Continued

Page 3 of 5

	Page 3 of 5
Placer County Assessor's Parcel Number	Area within Delineation Study Area (Acres)
090-123-008	0.17
090-123-009	0.16
090-123-010	0.17
090-123-011	0.16
090-123-015	0.05
090-123-016	0.13
090-123-017	0.10
090-123-018	0.06
090-123-019	0.02
090-123-021	0.02
090-123-021	0.08
090-123-023	0.30
090-123-024	0.22
090-123-025	0.04
090-123-026	0.13
090-123-027	0.10
090-124-019	0.07
090-124-020	0.07
090-125-001	0.29
090-125-019	0.07
090-125-025	0.14
090-125-026	0.07
090-126-014	0.36
090-126-017	0.11
090-126-020	0.29
090-126-021	0.18
090-126-022	0.18
090-126-024	0.29
090-126-025	0.32
090-126-032	0.10
090-126-037	0.14
090-126-038	0.36
090-126-039	0.14
090-126-040	0.14
090-133-003	0.15
090-133-005	0.36
090-133-006	0.05
090-133-007	0.26
090-133-008	0.27
090-133-009	0.16
090-133-010	0.22
090-133-011	0.17
090-133-012	0.40
090-133-015	0.51
090-133-016	
	0.13
090-133-018	0.26
090-134-001	0.26
090-134-002	0.17
090-134-005	0.35
090-134-006	0.17
090-134-007	0.18
090-134-008	0.27
090-134-011	0.20
090-134-017	0.33
090-134-023	0.17
090-134-024	0.37
090-134-029	0.29
090-134-030	0.32
, 000 101 000	0.02

Table 1. Continued

Page 4 of 5

Placer County Assessor's Parcel Number	Area within Delineation Study Area (Acres)
090-134-034	0.08
090-134-035	0.03
090-134-039	0.18
090-134-042	0.28
090-134-043	0.20
090-134-044	0.08
090-134-045	0.08
090-134-046	0.33
090-135-030	0.08
090-135-031	0.16
090-135-032	0.08
090-135-032	0.16
090-135-034	0.16
090-135-035	0.16
090-135-036	0.17
090-135-037	0.25
090-135-042	0.09
090-142-001	0.25
090-142-002	0.32
090-142-007	0.28
090-142-023	0.76
090-142-024	0.36
090-142-025	0.15
090-142-026	0.38
090-191-017	0.14
090-191-018	0.29
090-191-023	0.22
090-191-024	0.14
090-191-028	0.07
090-191-036	0.14
090-191-030	0.06
090-192-001	0.08
090-192-003	0.10
090-192-004	0.13
090-192-008	0.18
090-192-017	0.70
090-192-021	0.16
090-192-027	0.02
090-192-030	0.38
090-192-031	0.12
090-192-034	0.06
090-192-037	0.15
090-192-038	0.13
090-192-041	0.21
090-192-053	0.37
090-192-054	0.05
090-192-055	0.10
090-192-056	0.38
090-192-057	0.44
090-221-001	0.24
090-221-001	0.55
090-221-002	0.33
090-221-011	0.17
090-221-013	0.15
090-221-014	0.11
090-221-016	0.34
090-221-018	0.10
090-221-019	0.29

Table 1. Continued

Page 5 of 5

Placer County Assessor's Parcel Number	Area within Delineation Study Area (Acres)
090-221-020	0.21
090-221-021	0.10
090-222-016	0.19
090-222-017	0.14
117-180-001	0.46
117-180-003	0.32
117-180-005	1.11
117-180-006	0.16
117-180-007	0.15
117-180-009	0.50
117-180-012	0.24
117-180-027	0.79
117-180-028	0.78
117-180-036	0.23
117-180-037	0.23
117-180-038	0.23
117-180-039	0.22
117-180-050	0.19
117-180-052	0.66*
117-180-048	0.66*
117-180-047	0.66*
117-180-046	0.66*
117-180-045	0.66*
117-180-044	0.66*
117-180-043	0.66*

^{*} This number represents a collective acreage for these parcels. Individual parcel acreages were not available from Placer County's parcel information website http://www.placer.ca.gov/Home/Assessor/Assessment%20Inquiry/20Iframe.aspx.

understory, and the herbaceous layer contains long-anthered rush, mugwort, and small-fruited bulrush.

2.3. Ruderal Areas

Ruderal (i.e., disturbed) areas are located throughout the delineation study area. Ruderal areas primarily occur immediately adjacent to roads but also were observed adjacent to several of the sediment detention basins in the delineation study area. These areas typically consist of bare soil but may be vegetated with one to two species of annual grasses (i.e., quackgrass and thickspike wheatgrass).

2.4. Surface Hydrology

Griff Creek, a perennial stream that drains much of the area in and around the City of Kings Beach, originates approximately 1 mile east of Martis Peak and flows south through the western portion of the delineation study area, where it crosses under SR 28 and discharges into Lake Tahoe (Exhibit A). Other than Griff Creek, no other major drainages occur in the delineation study area, but a number of manmade, intermittent drainage ditches convey local snowmelt and stormwater runoff to Lake Tahoe via a stormwater collection system.

2.5. Soils

Soils in the delineation study area were mapped by the U.S. Soil Conservation Service during their survey of soils in the Lake Tahoe Basin (Rogers 1974). A total of four soil map units occur within the boundaries of the delineation study area (Figure 2). The general characteristics of the soils that occur within these map units are summarized in Table 2. Of the four soil map units that occur within the delineation study area, only the Beaches map unit is known to contain hydric inclusions (Natural Resources Conservation Service 1992).

Table 2. Soil Map Units in the Study Area

Soil Map Unit				Hydric
Symbol.a	Name	Drainage	Hydric Soils.a	Criteria ^b
JhC	Jabu stony sandy loam, moderately fine subsoil, variant, 2% to 9% slopes	Well drained	No hydric components or inclusions	N/A
Be	Beaches	Well drained	Watah (inclusion) Marla (inclusion) Tahoe, silt loam (inclusion)	4 2B3 2B2
Gr	Gravelly alluvial land	Somewhat poorly drained to poorly drained	No hydric components or inclusions	N/A
UmD	Umpa very stony sandy loam, 5% to 15% slopes	Well drained	No hydric components or inclusions	N/A

Notes:

- Sources: Rogers 1974; Natural Resources Conservation Service 1992.
- The hydric soil criteria are defined as (from Natural Resources Conservation Service 1992): Hydric Criteria 2B2, 2B3, and 4:
 - 2. Soils in Aquic suborders, Aquic subgroups, Albolls suborder, Salorthids great group, Pell great groups of Vertisols, Pachic subgroups, or Cumulic subgroups that are:
 - B. poorly drained or very poorly drained and have:
 - 2) a frequently occurring water table at less than 0.5 feet from the surface for a significant period (usually more than 2 weeks) during the growing season if permeability is equal to or greater than 6.0 in/hr in any layer within 20 inches.
 - 3) a frequently occurring water table at less than 1.0 feet from the surface for a significant period (usually more than 2 weeks) during the growing season if permeability is less than 6.0 in/hr in any layer within 20 inches.
 - 4. Soils that are frequently flooded for long duration or very long duration during the growing season.

3. Methods

The following information was reviewed for this delineation:

- Kings Beach USGS 7.5-minute topographic map;
- aerial photographs of the delineation study area (flown by Majors in October 1999);
- soil survey of the Tahoe Basin (Rogers 1974);
- wetland delineation reports for portions of the delineation study area completed by Harding ESE (2001) and Mactec Engineering and Consulting (2003, 2006).

On September 19 and 20, 2006, a Jones & Stokes botanist/wetland ecologist and a soil scientist delineated wetlands and other waters of the United States located within the boundaries of the delineation study area. The delineation was conducted in accordance with the routine onsite determination method described in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and in compliance with the Sacramento District of the Corps' *Minimum Standards for Acceptance of Preliminary Wetland Delineations* (U.S. Army Corps of Engineers 2001). Vegetation, soil, and hydrology data collected at eight data points during the delineation were recorded on wetland determination data sheets, which are located in Appendix A.

The scientific names of plants observed during the delineation or mentioned in the text, as well as their wetland indicator status, are provided in Appendix B. Scientific names follow *The Jepson Manual* (Hickman 1993), as updated by the Jepson Online Interchange, an online database maintained by the University of California and the Jepson Herbaria. The wetland indicator status of each species listed was obtained from Reed (1988).

A resource-grade global positioning system (GPS) unit was used to record the location of jurisdictional boundaries, data points, and other pertinent features wherever possible. The GPS data were downloaded and corrected in the office using the nearest available base-station data. The acreage of each feature was calculated in the ArcGIS program. Data were subsequently overlaid onto the aerial photo base to prepare the delineation map.

4. Results

A total of 0.719 acre of waters of the United States, consisting of 0.329 acre of wetlands and 0.390 acre of other waters of the United States, were identified within the boundaries of the delineation study area (Table 3). Intermittent drainage ditches also were observed in the delineation study area but were interpreted to be outside the scope of Corps jurisdiction under Section 404 of the CWA. The general characteristics and interpreted jurisdictional status of each feature mapped within the delineation study area are described below. Representative photographs of the wetlands and other waters observed within the delineation study area are located in Appendix C.

Table 3. Wetlands and Other Waters of the United States Found in the Delineation Study Area

Feature Type	Acres
Depressional Wetlands	0.329
Perennial Stream (Griff Creek)	0.204
Lake Tahoe	0.186
Total	0.719

4.1. Wetlands Depressional Wetlands

A total of seven depressional wetlands were found within the boundaries of the delineation study area (Exhibit A). Five of these wetlands (DW-1 to DW-5) are sediment detention basins that receive most of their hydrologic inputs from drainage ditches and that drain via corrugated metal standpipe drains. The sixth depressional wetland (DW-6) is a roadside depression that retains enough water, primarily in the form of surface runoff, to support hydrophytic vegetation. The seventh depressional wetland (DW-7) is located immediately adjacent to Lake Tahoe and receives water primarily via a culvert at its north end.

Hydrophytic plant species commonly observed in the depressional wetlands were big-leaf sedge, fewflower spikerush, American bulrush, Baltic rush, iris-leaved rush, long-anthered rush, yellow willow, and Mexican rush.

Depressional wetlands in the delineation study area were interpreted to have wetland hydrology based on observed drainage patterns and the presence of saturated soil. The soils observed in these depressional wetlands were determined to be hydric based on a low-chroma matrix (≤ 1) or, in areas where the soil had been disturbed recently, the presence of obligate hydrophytes and primary indicators of wetland hydrology (Appendix A, data sheets DP-1, DP-3, DP-5, and DP-7).

Wetland Boundaries and Jurisdictional Status

All of the depressional wetlands mapped within the study area support hydrophytic vegetation, contain hydric soils, and exhibit a positive indicator of wetland hydrology (Appendix A, data sheets DP-1, DP-3, DP-5, and DP-7). Accordingly, they all meet the definition of a wetland as described in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratories 1987). Surrounding upland areas lack positive indicators of one or more of these parameters (Appendix A, data sheets DP-2, DP-4, DP-6, and DP-8).

Water that spills out of the sediment detention basins (DW-1 to DW-5) enters the stormwater collection system and appears to end up in Lake Tahoe, a navigable water of the United States. When water overflows from DW-6, it appears to flow into Griff Creek. DW-7 is located on the shore of the lake, so when it overflows, the water spills directly into Lake Tahoe.

Based on these apparent hydrologic connections to Lake Tahoe, it is concluded that all of the depressional wetlands in the delineation study area are within the scope of Corps jurisdiction under Section 404 of the CWA.

4.2. Other Waters of the United States *Perennial Stream*

Griff Creek is a perennial stream that begins approximately 1 mile east of Martis Peak and flows south through the western portion of the delineation study area (Exhibit A). The jurisdictional width (i.e., the distance between opposing ordinary high water marks [OHWMs]) of the reach that flows through the delineation study area ranges from 3 to 30 feet (Exhibit A). The OHWM was identified based on the geomorphic characteristics of the stream channel (namely shelving). The reach supports a narrow band of riparian trees and shrubs that are primarily located above the OHWM.

Jurisdictional Status

Griff Creek is hydrologically connected to Lake Tahoe, a navigable water of the United States. As such, it is concluded that Griff Creek falls within the scope of Corps jurisdiction under Section 404 of the CWA.

Lake Tahoe

Lake Tahoe is a navigable water of the United States and falls within the scope of Corps jurisdiction under Section 404 of the CWA. In the absence of adjacent wetlands, the limit of Corps jurisdiction over Lake Tahoe is the OHWM, which was has been set at an elevation of 6,229.10 feet above mean sea level by the Corps' Sacramento District (U.S. Army Corps of Engineers 2005). Using this OHWM elevation, Jones & Stokes calculated that the project area includes 0.186 acre of jurisdictional Lake Tahoe (Exhibit A).

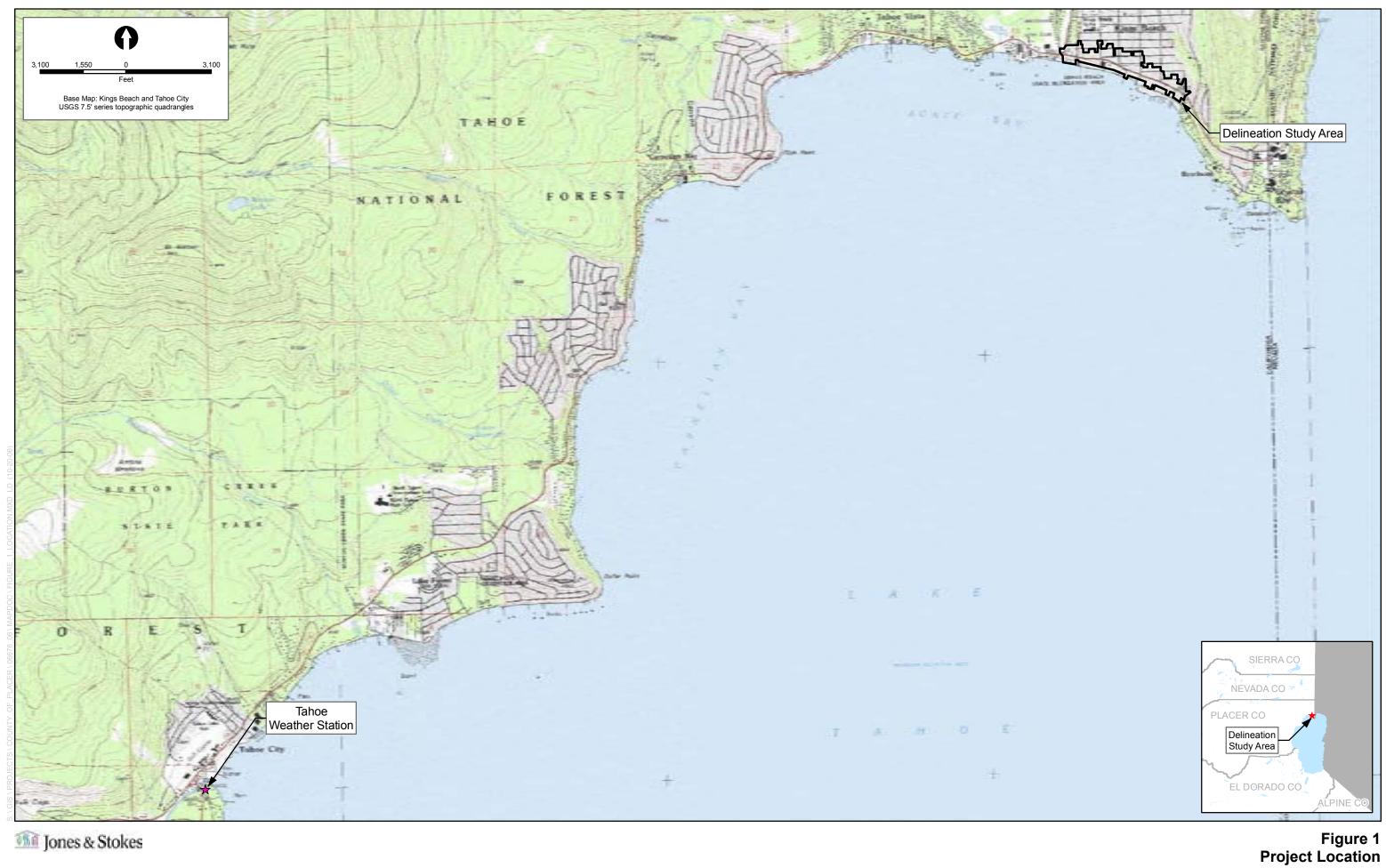
Nonjurisdictional Drainage Ditches

A number of manmade drainage ditches were observed within the boundaries of the delineation study area (Exhibit A). The ditches appear to flow intermittently during periods of snowmelt and intense rainfall and are either unvegetated or are vegetated with upland grasses such as squirreltail, quackgrass, thickspike wheatgrass, and tall oatgrass. Although water conveyed by these drainage ditches appears to discharge into Lake Tahoe via an underground stormwater collection system, they appear to have been excavated in uplands for drainage purposes and do not appear to have replaced any previously existing natural stream features. As such, it is concluded that these intermittent drainage ditches are outside the scope of Corps jurisdiction under Section 404 of the CWA.

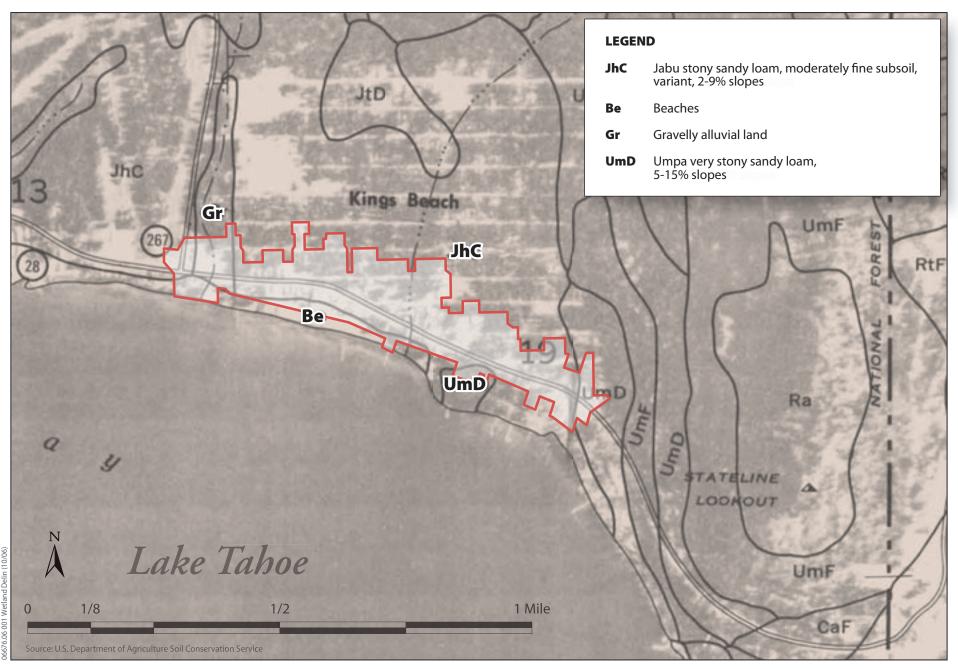
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Jones & Stokes



Jones & Stokes

Figure 2 Soils Survey Map

Exhibit A Preliminary Delineation of Wetlands and Other Waters of the United States

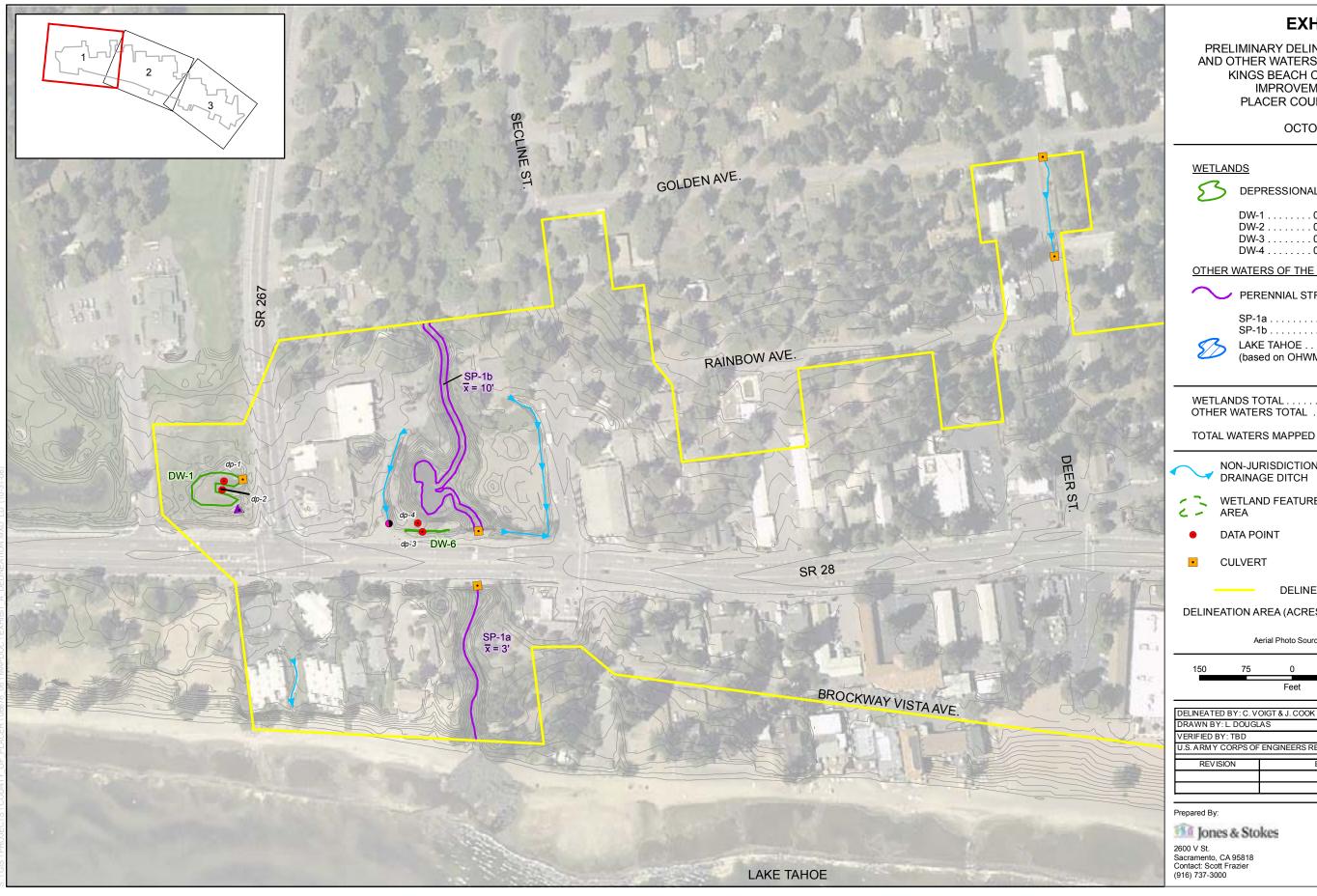


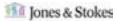
EXHIBIT A

PRELIMINARY DELINEATION OF WETLANDS AND OTHER WATERS OF THE UNITED STATES KINGS BEACH COMMERCIAL CORE IMPROVEMENT PROJECT PLACER COUNTY, CALIFORNIA

OCTOBER 2006

3	<u>WETLANDS</u>	AREA (ACRES)	
	DEPRESSIONAL W	'ETLAND 0.329	
No. of Street, or other Persons	DW-1 0.00 DW-2 0.09 DW-3 0.00 DW-4 0.00	99 DW-6 0.002 92 DW-7 0.001	
	OTHER WATERS OF THE U.S	<u>S.</u>	
ľ	PERENNIAL STREA	AM (GRIFF CREEK) 0.204	
	SP-1a	0.145	
The state of	(based on OHWM o	0.186 f 1898.629 m NGVD)	
	WET AND TOTAL	0.220	
	WETLANDS TOTAL OTHER WATERS TOTAL		
	TOTAL WATERS MAPPED	0.719	
/	NON-JURISDICTIONAL DRAINAGE DITCH	INTERMITTENT	
	WETLAND FEATURE C	UTSIDE OF DELINEATION	
2	DATA POINT	DETENTION BASIN DRAIN	
	• CULVERT •	STORM DRAIN INLET	
	—— DELINEAT	ION AREA BOUNDARY	
	DELINEATION AREA (ACRES)		
	Aerial Photo Source: N	fajors, October 1999	
	150 75 0	150	
	Feet	•	

Prepared By:



2600 V St. Sacramento, CA 95818 Contact: Scott Frazier (916) 737-3000

Prepared For:

Placer County Department of Public Works Pioneer Commerce Center 10825 Pioneer Trail, Suite 105 Truckee, CA 96161 Contacts: Ken Grehm and Dan LaPlante, P.E. Phone: (530) 889-7615 and (530) 581-6231

SEPTEMBER 2006

SEPTEMBER 2006

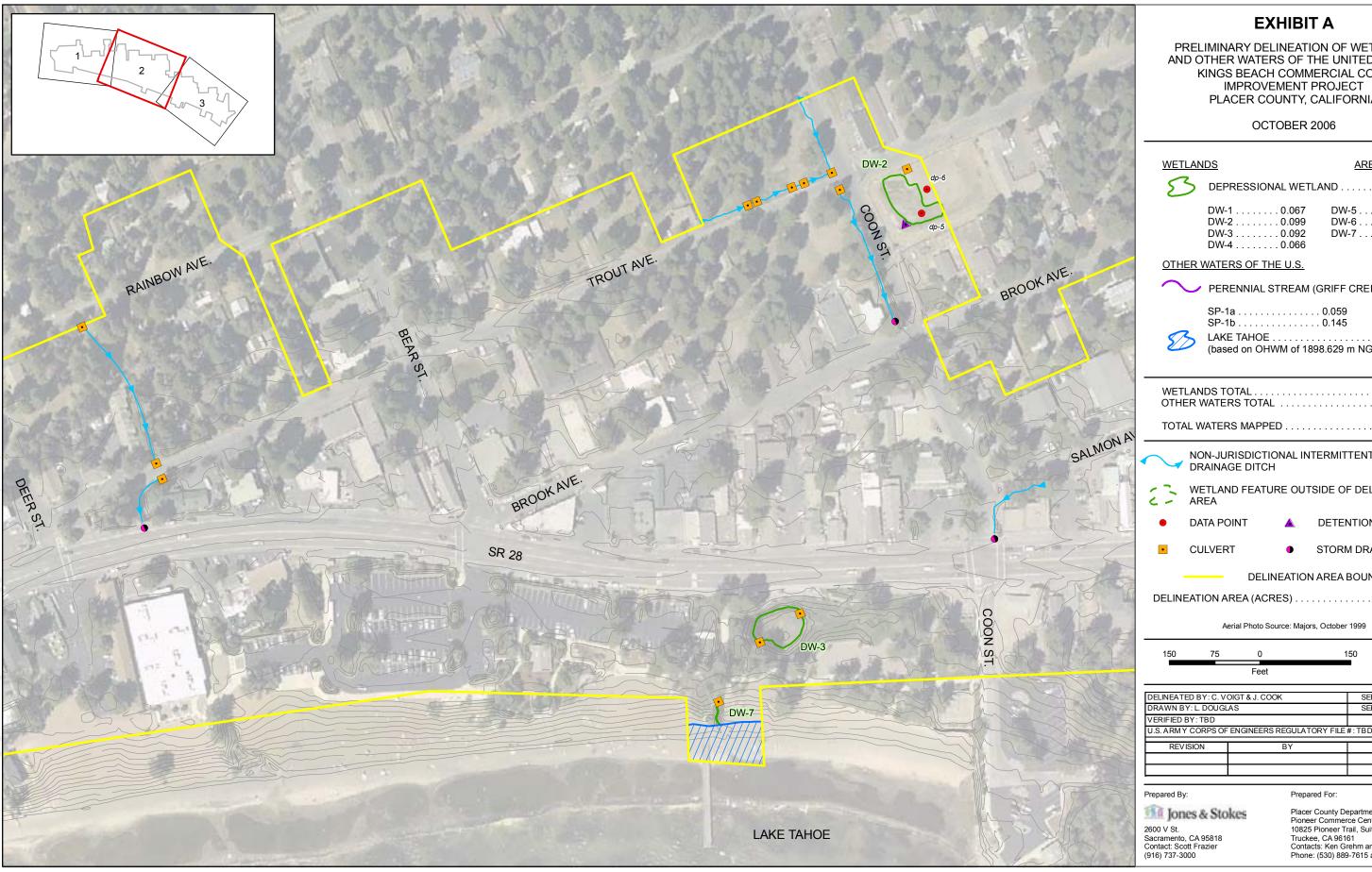


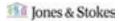
EXHIBIT A

PRELIMINARY DELINEATION OF WETLANDS AND OTHER WATERS OF THE UNITED STATES KINGS BEACH COMMERCIAL CORE IMPROVEMENT PROJECT PLACER COUNTY, CALIFORNIA

OCTOBER 2006

	<u>WETLANDS</u>	AREA (ACRES)			
	DEPRESSIONAL W	DEPRESSIONAL WETLAND 0.329			
	DW-1 0.06 DW-2 0.09 DW-3 0.09 DW-4 0.06	9 DW-6 0.002 2 DW-7 0.001			
	OTHER WATERS OF THE U.S	i <u>.</u>			
	PERENNIAL STREA	M (GRIFF CREEK) 0.204			
	SP-1a				
1	WETLANDS TOTAL OTHER WATERS TOTAL				
1	TOTAL WATERS MAPPED				
0	NON-JURISDICTIONAL INTERMITTENT DRAINAGE DITCH				
125	WETLAND FEATURE O	UTSIDE OF DELINEATION			
-	DATA POINT	DETENTION BASIN DRAIN			
	• CULVERT •	STORM DRAIN INLET			
1	—— DELINEATI	ON AREA BOUNDARY			
	DELINEATION AREA (ACRES)				
~	Aerial Photo Source: Majors, October 1999				
	150 75 0	150			
	Feet				
1	DELINEATED BY: C. VOIGT & J. COOK DRAWN BY: L. DOUGLAS	SEPTEMBER 2006 SEPTEMBER 2006			
1	VERIFIED BY: TBD	TBD			

Prepared By:



2600 V St. Sacramento, CA 95818 Contact: Scott Frazier (916) 737-3000

Prepared For:

Placer County Department of Public Works Pioneer Commerce Center 10825 Pioneer Trail, Suite 105 Truckee, CA 96161 Contacts: Ken Grehm and Dan LaPlante, P.E. Phone: (530) 889-7615 and (530) 581-6231

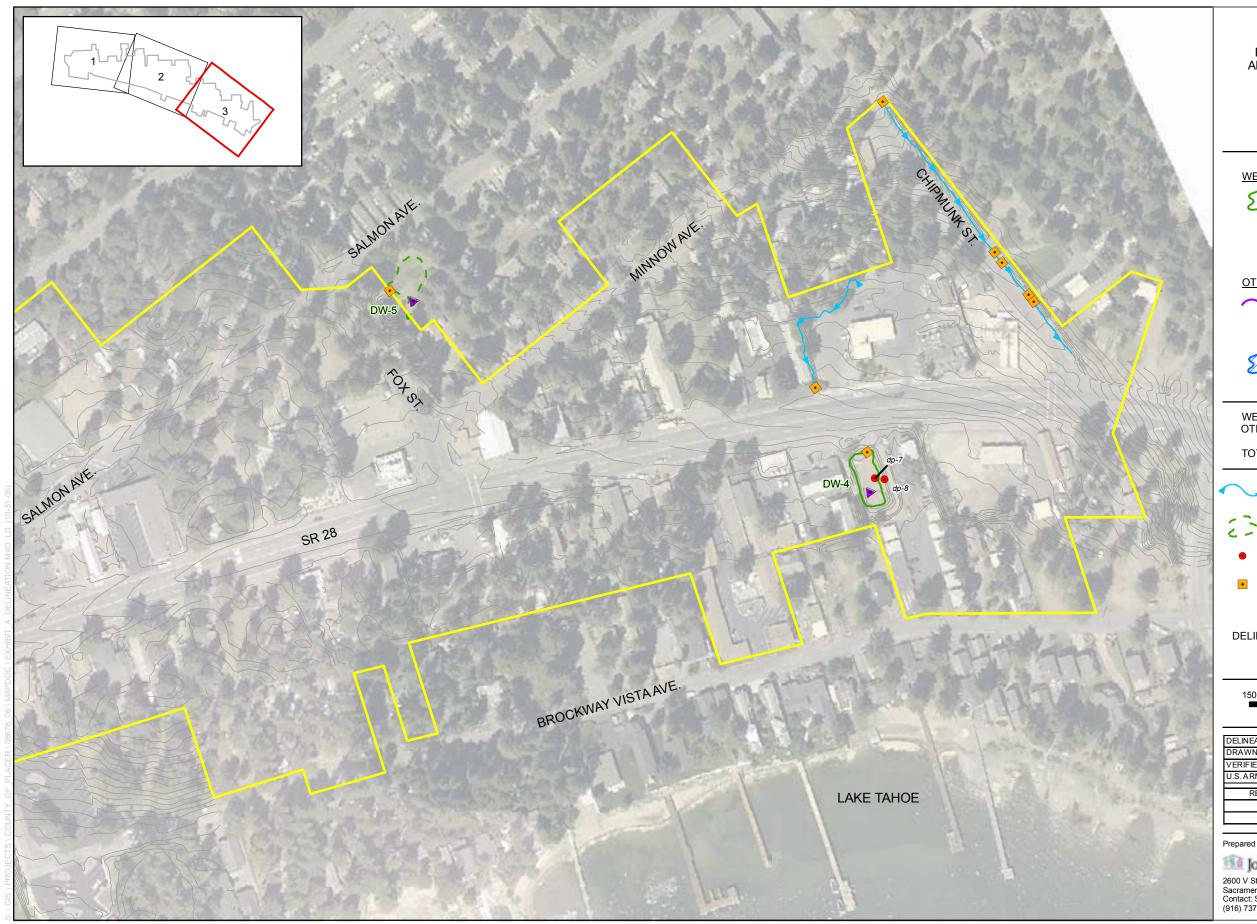


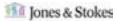
EXHIBIT A

PRELIMINARY DELINEATION OF WETLANDS AND OTHER WATERS OF THE UNITED STATES KINGS BEACH COMMERCIAL CORE IMPROVEMENT PROJECT PLACER COUNTY, CALIFORNIA

OCTOBER 2006

WETLANDS AREA (ACRES)				AREA (ACRES)
DEPRESSIONAL WETLAND 0.329				0.329
OTHER	DW-1	0.099 0.092 0.066	DW-	-50.002 -60.002 -70.001
			(CDIEE	CDEEK) 0.204
			•	CREEK) 0.204
8	SP-1a SP-1b LAKE TAHOE (based on Oh	 E	0.145	0.186 m NGVD)
WETLAN OTHER V	WETLANDS TOTAL			
TOTAL W	TOTAL WATERS MAPPED			
NON-JURISDICTIONAL INTERMITTENT DRAINAGE DITCH				
2 NE AR		URE OUT	SIDE OF	DELINEATION
• DA	TA POINT		DETEN	NTION BASIN DRAIN
■ cu	LVERT	•	STORM	I DRAIN INLET
_	DEL	INEATION	N AREA E	BOUNDARY
DELINEATI	DELINEATION AREA (ACRES)			
Aerial Photo Source: Majors, October 1999				
150	150 75 0 150			
10	Fee	t		
DELINEATED BY DRAWN BY: L. I	Y: C. VOIGT & J. C DOUGLAS	OOK		SEPTEMBER 2006 SEPTEMBER 2006
VERIFIED BY: T	BD RPS OF ENGINEEF	RS REGULAT	ORY FILE	TBD #:TBD

Prepared By:



2600 V St. Sacramento, CA 95818 Contact: Scott Frazier (916) 737-3000

Prepared For:

Placer County Department of Public Works Pioneer Commerce Center 10825 Pioneer Trail, Suite 105 Truckee, CA 96161 Contacts: Ken Grehm and Dan LaPlante, P.E. Phone: (530) 889-7615 and (530) 581-6231

Appendix A Data Sheets

Jones &	<u>®्री</u> & Stok	es		ROUTINE W	DATA FOF /ETLAND DE	RM ETERMINATION					
Project/Site:		Kings Beach Con	nmercial Co	re Improveme	nt Project	State:	California				
Applicant/Own	er:	Placer County De	partment of	Public Works		County:	Placer				
Investigator(s):	:	C. Voigt, J. Cook				S/T/R	13/16N/17E				
Date:		09/19/06									
		exist on the site?		✓ YES	NO	Community ID:	Depressional W	etland			
_	•	urbed (atypical situat	tion)?	YES	☑ NO	Transect ID:	DW-1				
Is the area a p	-			YES	✓ NO	Plot ID:	DP-1				
(If needed, e	explain below	v)									
VEGETAT	ION										
Dominant Pla	ant Species		Strata	% Rel. Cover	Indicator	Associate Plant	t Species	Strata	% Rel. Cover	Indicator	
Juncus xiphioi	des		Н	50	OBL						
Carex amplifol	lia		Н	50	OBL						
Percent of do	minants that	are OBL, FACW, or	FAC (exclud	ing FAC-):	100%		Total veg	etation cover	90	%	
	Physiologica Visual Obse	al Adaptations al/Reproductive Adap rvation of Plant Spec ed Inundation/Saturat	ies Growing	in Areas of			Personal Knowled Technical Literatu Other (explain bel	re	al Plant Commu	nities	
Hydrophy	vtic Vegeta	ation Present?		✓ YES	NO						
Remarks:	,										
HYDROLO	OGY										
Is it the growin	g season?	YES	✓ NO								
Based On:		Soil Temp (record)				Wetland Hydrold	ogy Indicators:				
	<u></u>	Other (explain)		data from WR	CC (2006)	06) Primary Indicators:					
Typical length: 130 Days				5% =	6.5 days	Inundated Saturated Upper 12 Inches			nches		

HYDROL	OGY							
Is it the growi	ng season?	YES	✓ NO					
Based On:		Soil Temp (record)				Wetland Hydrolo	gy Indicate	ors:
	✓	Other (explain)		data from	WRCC (2006)	Primary Indica	ators:	
Typical lengt	n:	130	Days	5% =	6.5 days			Inundated
								Saturated Upper 12 Inches
Recorded Da	ta (describe	below):						Water Marks
		Stream, Lake, or Ti	de Gauge					Drift Lines
	✓	Aerial Photographs						Sediment Deposits
		Other					✓	Drainage Patterns in Wetlands
		None Available						
Field Observ	ations:					Secondary Ind	icators (2	or more required):
	Depth of Su	rface Water:	none	inches				Oxidized Rhizospheres in Upper 12 Inches
	Depth to Sta	anding Water in Pit:	>12	inches				Water-Stained Leaves
	Depth to Sa	turated Soil:	>12	inches				Local Soil Survey Data
							H	FAC-Neutral Test
				_			Ш	Other (explain below)
Wetland I	lydrology	Present?		✓ YES	NO			
Remarks:								
The soil	was wet the	roughout but not sa	aturated, lik	ely as the re	esult of recent sp	orinkler irrigation.		
-								

11/22/2006 DP-1 (revised)

SOLLS Plot ID: DP-1

JUILS								P	10t ID: DP-	I
Map Unit Na	me (series and	phase):	Jabu stony sandy loa	m, mod. fine subs	oil, variant	, 2-9% slopes	Drainage Class:	Well-drained		
Taxonomy (s	subgroup):	Ultic Haplox	eralfs			Field observati	ons confirm mappe	d type?	YES	✓ NO
Is data point	located within a	hydric inclus	ion?	YES V	NO					
Profile Desc										
						Re	edoximorphic Featu	res		
I I and a second	Depth (in all all)	T	Oten and annual	Matrix Co		Abundance,	Tono location	0-1 (Other
Horizon	(inches) 0-1	Texture sil	Structure	(moist	,	Size, Contrast	Type, location	Color (moist)		Other
	1-10	sl		10YR 3		none				
	10-12	xgrsl		10YR 3/4	-4/1	none				***
Hudria Cail I	ndiantara (abaala	all that appli								
Hydric Soil II	ndicators (check	Histosol	y):			Mn or Fe i	Concretions or Nod	ules		
		Histic Epipe	don				nic Content in Surfa		ndy Soils	
		Sulfidic Odd					treaking in Sandy S	=	,	
		Aquic Moist	ure Regime				National/Local Hydi			
		Reducing C	onditions (α , α -	dipyridyl test)		Other (exp	olain below)			
	V		ow-Chroma (<u><</u> 1) ma							
		Matrix Chro	ma <2 with Redoxin			nd/or Depletions	3			
Hydric So	ils Present?			✓ YES	NO					
WETLAND	DETERMINA	TION:								
Hydrophyti	c vegetation pre	sent?		✓ YES [NO					
Wetland hy	drology present	?		✓ YES [NO					
Hydric soils	•			✓ YES	NO	Is the sampling	ng point within a v	wetland?	✓ YES	NO
Remarks: Data po		within a sec	diment detention b	pasin.						
	Textur	e and Roc	k Fragment Cont					rphic Feature	Morpho	logy
Texture cos - coarse sa	and	vfsl - very fine	e sandy loam	gr - gravelly	S	Abundance f - few	e	Type Fe-x - iron co	ncentration	(soft mass)
s - sand	and	I - loam	odinay idalii	vgr - very gravelly	y	c - commor	n	Fe-nc - iron r		` '
s - fine sand		sil - silt loam		xgr - extremely g	ravelly	m - many		-		entration (soft mass)
vfs - very fine s lcos - loamy co		si - silt scl - sandy cli	av loam	cb - cobbly vcb - very cobbly	,	Size		Mn-nc - man d - depletion	-	lule or concretion

cl - clay loam ls - loamy sand lfs - loamy fine sand xcb - extremely cobbly sicl - silty clay loam sc - sandy clay st - stony vst - very stony xst - extremely stony lvfs - loamy very fine sand cosl - coarse sandy loam sic - silty clay sl - sandy loam fsl - fine sandy loam c - clay

1 - fine (<2mm) 2 - medium 2-5mm)

3 - coarse (5–20mm) 4 - very coarse (20–76mm)

5 - extremely coarse (>76mm)

Contrast f - faint

d - distinct

Location mat - soil matrix

ped - ped surface por - soil pores otr - other

p - prominent

11/22/2006 DP-1 (revised)



Remarks:

DATA FORM

jones &	Stok	es		ROUTINE W	ETLAND DE	TERMINATION						
Project/Site:		Kings Beach Con	nmercial Co	re Improveme	nt Project	State:	California					
Applicant/Owner:		Placer County De	partment o	f Public Works	;	County:	Placer					
Investigator(s):		C. Voigt, J. Cook				S/T/R	13/16N/17E					
Date:		09/19/06										
Do normal circun	nstances	exist on the site?		✓ YES	NO	Community ID:	Grassland					
Is the site signific	cantly dist	urbed (atypical situat	ion)?	YES	✓ NO	Transect ID:	DW-1					
Is the area a pote	-			YES	✓ NO	Plot ID:	DP-2					
(If needed, exp	olain below	v)										
VEGETATIO	N											
Dominant Plant	Species		Strata	% Rel. Cover	Indicator	Associate Plant	t Species	Strata	% Rel. Cover	Indicator		
Populus tremuloid	des		T	40	FAC+							
Cornus sericea			S	20	FACW							
Lupinus latifolius			Ι	20	NL							
Alnus incana ssp.	. tenuifolia	9	Т	20	NI							
Percent of domin	nants that	are OBL, FACW, or	FAC (exclud	ling FAC-):	50%		Total veg	etation cover	75	%		
		, , ,	(- (-	3 - /								
Пмо	ornhologic	al Adaptations					Personal Knowled	lae of Region	al Plant Commu	nities		
		l/Reproductive Adap	tations			Ä	Technical Literatu		iai i iai ii ooniina			
	, ,	rvation of Plant Spec		in Areas of		i i	Other (explain bel					
VIS		ed Inundation/Saturat	•	III Aleas Ol			Other (explain bei	Ow)				
			.1011	YES	✓ NO							
	c vegeta	tion Present?		☐ 1E3	L NO							
Remarks:												
HYDROLOG	·V											
						T						
Is it the growing s	season?	YES	✓ NO									
Based On:	□ ✓	Soil Temp (record)				Wetland Hydrolo	ogy Indicators:					
		Other (explain)		data from WF	RCC (2006)	Primary Indica	ators:					
Typical length:		130	Days	5% =	6.5 days		Inundat	ed				
							Saturat	ed Upper 12	Inches			
Recorded Data (describe b	pelow):					☐ Water M	Marks				
		Stream, Lake, or Tid	de Gauge				Drift Lin	ies				
	✓	Aerial Photographs					Sedime	nt Deposits				
		Other					_	e Patterns ir	Wetlands			
		None Available						,0	· · · · · · · · · · · · · · · · · · · ·			
Field Observation						Soon dame to	diantoro (2 az zas za	roquire 4\.				
Field Observation		food Water		inahaa		Secondary Inc	dicators (2 or more	. ,	in Hanne 40 I			
	•	face Water:	none	inches				-	res in Upper 12 I	nones		
	-	inding Water in Pit: turated Soil:	>12	inches				Stained Leav				
De	pin io Sat	urateu ouil:	>12	inches				oil Survey Da eutral Test	ala			
								eutrai Test explain below	v)			
Wetland Hyd	Irology 5	Procent?		YES	✓ NO		Outer (piaiii bolow	.,			
***Cuanu nyu	ii ology r	1696111:		L IE3	L INO							

11/1/2006 DP-2

SOLLS Plot ID: DP-2

SUILS								F	IOT ID: DP-	<u> </u>
Map Unit Na	ame (series and p	hase):	Jabu stony sandy loa	ım, mod. fine sub	soil, varian	t, 2-9% slopes	Drainage Class:	Well-drained		
Taxonomy (s	subgroup):	Ultic Haplox	ceralfs			Field observati	ons confirm mappe	d type?	✓ YES	NO
ls data point	located within a h	nydric inclus	sion?	YES Z	NO					
Profile Desc	cription									
						Re	edoximorphic Featu	ires		
Horizon	Depth (inches)	Texture	Structure	Matrix ((mois		Abundance, Size, Contrast	Type, location	Color (moist)		Other
	0-12	sl		10YR	3/3	none				
Hydric Soil I	ndicators (check	all that appl Histosol	y):			Mn or East	Concretions or Nod	lules		
	_	nistosoi Histic Epipe	edon			_	inic Content in Surf		ndy Soils	
		Sulfidic Odd					treaking in Sandy S	-	•	
		•	ure Regime			Listed on	National/Local Hyd	ric Soils List		
		_	Conditions (α , α -			Other (exp	olain below)			
		-	ow-Chroma (<1) ma		otrations a	nd/or Donlotions				
Lludria Ca		Matrix Chro	ma <2 with Redoxir	YES YES	NO NO	na/or Depletions	3			
Remarks:	oils Present?									
VETLAND	DETERMINAT	ION :								
Hydrophyt	ic vegetation pres	sent?		YES	✓ NO					
	ydrology present?	•		YES	✓ NO				_	_
Hydric soil Remarks:				YES	✓ NO	Is the sampling	ng point within a	wetland?	YES	✓ NO
Data p	oint is located c	n a narrov	v mound that exte	nds into the s	sediment	detention basi	n.			
Texture	Texture	and Roc	k Fragment Con		te	Abundanc		orphic Feature	Morpho	logy
cos - coarse s	and	vfsl - very fine	e sandy loam	gr - gravelly	ıə	f - few	<u> </u>	Type Fe-x - iron co	oncentration	n (soft mass)
- sand	1	l - loam	-	vgr - very grave		c - commor	n	Fe-nc - iron	nodule or co	oncretion
s - fine sand /fs - very fine		sil - silt loam si - silt		xgr - extremely cb - cobbly	gravelly	m - many		-		centration (soft mass) dule or concretion
		scl - sandv cl	av Inam	vcb - very cobb	lv.	Size		d - depletion		

scl - sandy clay loan cl - clay loam sicl - silty clay loam sc - sandy clay ls - loamy sand lfs - loamy fine sand xcb - extremely cobbly st - stony vst - very stony xst - extremely stony lvfs - loamy very fine sand cosl - coarse sandy loam sic - silty clay sl - sandy loam fsl - fine sandy loam c - clay

1 - fine (<2mm) 2 - medium 2-5mm)

3 - coarse (5–20mm) 4 - very coarse (20–76mm)

5 - extremely coarse (>76mm)

Contrast f - faint

d - distinct

p - prominent

DP-2

Location

mat - soil matrix ped - ped surface por - soil pores otr - other

11/1/2006



DATA FORM

JOINGS & BUOK	Co		ROUTINE W	ETLAND DE	TERMINATION					
Project/Site:	Kings Beach Con	nmercial Co	re Improveme	nt Project	State:	California				
Applicant/Owner:	Placer County De	partment of	Public Works		County:	Placer				
Investigator(s):	C. Voigt, J. Cook				S/T/R	19/16N/18E				
Date:	09/19/06									
Do normal circumstances e	exist on the site?		✓ YES	NO	Community ID:	Depressional W	etland			
Is the site significantly distu	urbed (atypical situat	tion)?	YES	✓ NO	Transect ID:	DW-6				
Is the area a potential prob	lem area?		YES	✓ NO	Plot ID:	DP-3				
(If needed, explain below	/)									
VEGETATION										
Dominant Plant Species		Strata	% Rel. Cover	Indicator	Associate Plan	t Species	Strata	% Rel. Cover	Indicator	

Dominant Plant Species	Strata	% Rel. Cover	Indicator	Associate Plant	Species	Strata	% Rel. Cover	Indicator
Juncus mexicanus	Н	75	FACW	Tanacetum vulg	are	Н	5	NL
Carex amplifolia	Н	20	OBL					
Percent of dominants that are OBL, FACW, or	FAC (exclud	ing FAC-):	100%		Total veg	etation cover	75	%
Morphological Adaptations Physiological/Reproductive Adap Visual Observation of Plant Spec	cies Growing	in Areas of			Personal Knowled Technical Literatu Other (explain bel	re	al Plant Commu	nities
Hydrophytic Vegetation Present?		✓ YES	NO					
Remarks:								

Is it the growing		YES	✓ NO			
Based On:	□ ✓	Soil Temp (record) Other (explain)		data from	WRCC (2006)	Wetland Hydrology Indicators: Primary Indicators:
D	ons:	130	Ü	inches inches inches	6.5 days	Inundated Saturated Upper 12 Inches Water Marks Drift Lines Sediment Deposits Jorainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Rhizospheres in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (explain below)
Wetland Hy	drology l	Present?		✓ YES	NO	
Remarks: Manmade bank is les			along the n	orth side of	the roadside dra	drainage ditch but on the south side of the ditch (closest to the road) the

11/1/2006 DP-3

SUILS								P	lot ID: DP-3
Map Unit Na	ame (series and	ohase):	Jabu stony sandy loa	m, mod. fine subs	soil, variant	, 2-9% slopes	Drainage Class:	Well-drained	
Taxonomy (s	subgroup):	Ultic Haplox	eralfs			Field observati	ons confirm mappe	d type?	☐ YES ✓ NO
-	located within a			YES 🗸	NO		.,,,	. 71 -	
Profile Desc		nyano moias		التا ي الت	-				
						R	edoximorphic Featu	ires	
							- In the state of		†
	Depth			Matrix C	olor	Abundance,			
Horizon	(inches)	Texture	Structure	(moist	,	Size, Contrast	Type, location	Color (moist)	Other
	0-13	sl		10YR 3	3/1	none			
Hydric Soil I	ndicators (check	all that appl	y):				•		
		Histosol	_			_	Concretions or Nod		
	_	Histic Epipe					anic Content in Surf	-	ndy Soils
	_	Sulfidic Odd					streaking in Sandy S National/Local Hyd		
		Aquic Moist	onditions (α , $lpha$ -	dinyridyl toet)			national/Local Hydi plain below)	TIC SOIIS LIST	
			ow-Chroma (<1) ma			Culei (ex	Jidii i Dolow)		
	=	•	ma <u><</u> 2 with Redoxin		nd/or Depletions	5			
Hydric So	oils Present?								
WETLAND	DETERMINA	ΓΙΟN :							
Hydrophyt	ic vegetation pre	sent?			NO				
Wetland h	ydrology present	?			NO				
Hydric soil Remarks	s present?			✓ YES	NO	Is the sampli	ng point within a	wetland?	✓ YES NO
			dside depression t duration during t					drophytic vege	tation, which suggests that
Texture	Textur	e and Roc	k Fragment Cont	ent Rock Fragment	<u> </u>	Abundanc		rphic Feature	Morphology
cos - coarse s	and	vfsl - very fine	e sandy loam	gr - gravelly		f - few	<u> </u>		oncentration (soft mass)
s - sand		I - loam	•	vgr - very gravell		c - commor	า	Fe-nc - iron	nodule or concretion
fs - fine sand		sil - silt loam		xgr - extremely g	ıraveliy	m - many		Mn-x - mang	panese concentration (soft mass)

cb - cobbly vcb - very cobbly xcb - extremely cobbly vfs - very fine sand si - silt lcos - loamy coarse sand scl - sandy clay loam cl - clay loam ls - loamy sand Ifs - loamy fine sand sicl - silty clay loam st - stony lvfs - loamy very fine sand sc - sandy clay vst - very stony cosl - coarse sandy loam sic - silty clay xst - extremely stony sl - sandy loam c - clay fsl - fine sandy loam

Size 1 - fine (<2mm) 2 - medium 2-5mm) 3 - coarse (5-20mm)

4 - very coarse (20-76mm) 5 - extremely coarse (>76mm)

Contrast f - faint

d - distinct

p - prominent

Mn-nc - manganese nodule or concretion d - depletion

Location

mat - soil matrix ped - ped surface por - soil pores otr - other

11/1/2006 DP-3



DATA FORM ROUTINE WETLAND DETERMINATION

,			TOOTHIL V	VETENIND DE	- 1 - 1 (1)						
Project/Site:	Kings Beach Cor	nmercial Co	re Improveme	nt Project	State:	California					
Applicant/Owner:	Placer County De	epartment o	f Public Works	3	County:	Placer					
Investigator(s):	C. Voigt, J. Cook				S/T/R	19/16N/18E					
Date:	09/19/06										
Do normal circumstance			✓ YES	NO	Community ID:	Ruderal	Ruderal				
Is the site significantly of		tion)?	YES	✓ NO	Transect ID:	DW-6					
Is the area a potential p		,	YES	✓ NO	Plot ID:	DP-4					
(If needed, explain be	low)		_	_							
	•				•						
VEGETATION											
								1			
Dominant Plant Specie	es	Strata	% Rel. Cover	Indicator	Associate Plant	t Species	Strata	% Rel. Cover	Indicator		
Elymus lanceolatus		Н	50	NI*							
Elytrigia repens		Н	50	NI*							
Percent of dominants to	nat are ORL FACW or	FΔC (eycluc	ling EAC-):	0%		Total yea	etation cover	50	%		
T Crocint of dominants to	lat are ODE, I MOVV, O	1710 (CXCIGO	iiig i AO j.	070		_ rotal veg	Clation cover	- 50	1 70		
						5 11/		1.51			
	gical Adaptations					Personal Knowled		ai Piant Commu	nities		
	ical/Reproductive Adap					Technical Literatu					
☐ Visual Ob	servation of Plant Spec	ies Growing	in Areas of			Other (explain bel	ow)				
Prolor	nged Inundation/Satura	tion									
Hydrophytic Veg	etation Present?		YES	✓ NO							
Remarks:											
HYDROLOGY											
HIDROLOGI											
Is it the growing season	? YES	✓ NO									
Based On:	Soil Temp (record)				Wetland Hydrol	ogy Indicators:					
✓	Other (explain)		data from WF	RCC (2006)	Primary Indic	ators:					
Typical length:	130	Days	5% =	6.5 days		Inundat	ed				
,, ,					1	Saturat	ed Upper 12 I	Inches			
Recorded Data (describ	e helow):					Water N					
	Stream, Lake, or Ti	ido Coura				Drift Lin					
.		•									
	Aerial Photographs						nt Deposits				
	Other					Drainag	e Patterns in	Wetlands			
	None Available										
Field Observations:					Secondary Inc	dicators (2 or more	required):				
Depth of S	Surface Water:	none	inches			Oxidize	d Rhizospher	es in Upper 12 I	nches		
Depth to S	Standing Water in Pit:	>18	inches			Water-9	Stained Leave	es			
Depth to S	Saturated Soil:	>18	inches			Local S	oil Survey Da	ıta			
			_			FAC-Ne	eutral Test				
						Other (explain below)			
Wetland Hydrolog	y Present?		YES	✓ NO							
Remarks:											

11/1/2006 DP-4

SOILS Plot ID: DP-4

JOILU									IOU ID. DI	·
Map Unit Name	(series and p	phase):	Jabu stony sandy loa	am, mod. fine	subsoil, variar	it, 2-9% slopes	Drainage Class:	Well-drained		
axonomy (sub	group):	Ultic Haplox	eralfs			Field observativ	ons confirm mappe	ed type?	✓ YES	NO
data point loc	ated within a	hvdric inclus	ion?	YES	✓ NO					
rofile Descript		,								
						Re	edoximorphic Featu	ıres		
I I a simon	Depth	T	04		rix Color	Abundance,	Toma la setta a	0-1 (Other
Horizon	(inches) 0-18	Texture vgrs	Structure		noist) YR 3/2	Size, Contrast	Type, location	Color (moist)		Other
	0 10	vgis		10	11(5/2	Horic				
drio Soil Indi	natore (abasis	all that and	۸۰							
runc son indi	cators (check	Histosol	y).			Mn or Fe (Concretions or Nod	lules		
	_	Histic Epipe	don			_	anic Content in Surf		ndy Soils	
	_	Sulfidic Odo					treaking in Sandy S	=		
	_	Aquic Moist	•			_	National/Local Hyd	ric Soils List		
		U	onditions (α , α	.,,,	st)	Other (exp	plain below)			
	=	•	ow-Chroma (<u><</u> 1) m ma <u><</u> 2 with Redoxi		ncentrations s	and/or Depletions	3			
lydric Soils		MAGNA OTHU	na ≥∠ wiiii Neu0XII	YES	✓ NO	maror Depletions	•			
Remarks:	. 10001111									
ETLAND DE Hydrophytic v				YES	✓ NO					
Wetland hydro	-			YES	✓ NO					
Hydric soils pi		•		YES	✓ NO	Is the sampling	ng point within a	wetland?	YES	✓ NO
Remarks:				L IES		_ io the samplin	is point within a	**************************************		
exture	rextur	e and Roci	k Fragment Con	Rock Fragi	ments	Abundance		orphic Feature	worphol	ogy
s - coarse sand		vfsl - very fine	sandy loam	gr - gravelly	1	f - few	<u>- </u>	Fe-x - iron co		,
sand - fine sand		I - loam sil - silt loam		vgr - very g		c - common m - many	1	Fe-nc - iron i		ncretion entration (soft mass)
s - fine sand sil - silt loam xgr - extremely grav fs - very fine sand si - silt cb - cobbly							Mn-nc - man	ganese nod	ule or concretion	
os - loamy coarse sand scl - sandy clay loam vcb - very cobbly				•	Size d - depletion					
- loamy sand cl - clay loam xcb - extremely cobl - loamy fine sand sicl - silty clay loam st - stony					iely copply	1 - fine (<2mm) 2 - medium 2–5mm) Location				
- loamy fine sand sicl - silty clay loam st - stony s - loamy very fine sand sc - sandy clay vst - very stony						z - medium	12-511111)	Location		
sl - coarse sand		sc - sandy cla sic - silty clay		•	•	3 - coarse (,	mat - soil ma ped - ped su		

Contrast f - faint

5 - extremely coarse (>76mm)

d - distinct

p - prominent

ped - ped surface por - soil pores otr - other

DP-4

11/1/2006

c - clay

sl - sandy loam fsl - fine sandy loam



DATA FORM

JOHES & STOK	.cs		ROUTINE W	ETLAND DE	TERMINATION						
Project/Site:	Kings Beach Con	nmercial Co	re Improveme	nt Project	State:	California					
Applicant/Owner:	Placer County De	partment of	f Public Works	1	County:	Placer					
Investigator(s):	C. Voigt, J. Cook				S/T/R	19/16N/18E					
Date:	09/19/06										
Do normal circumstances	exist on the site?		✓ YES	NO	Community ID:	Depressional W	/etland				
Is the site significantly dist		tion)?	YES	✓ NO	Transect ID:	DW-2					
Is the area a potential prob			YES	✓ NO	Plot ID:	DP-5					
(If needed, explain below	v)										
VEGETATION											
Dominant Plant Species		Strata	% Rel. Cover	Indicator	Associate Plant	t Species	Strata	% Rel. Cover	Indicator		
Scirpus americanus		Н	30	OBL							
Eleocharis pauciflora		Н	70	OBL							
,											
Percent of dominants that	are OBL, FACW, or	FAC (exclud	ling FAC-):	100%		Total veg	etation cover	80	%		
<u></u>					_						
	al Adaptations					Personal Knowled	ge of Regiona	al Plant Commu	nities		
	I/Reproductive Adap					Technical Literatu	re				
☐ Visual Obse	rvation of Plant Spec	cies Growing	in Areas of			Other (explain bel	ow)				
Prolonge	d Inundation/Satura	tion									
Hydrophytic Vegeta	tion Present?		✓ YES	NO							
Remarks:											
HYDROLOGY											
Is it the growing season?	YES	✓ NO							·		
Based On:	Soil Temp (record)				Wetland Hydrold	ogy Indicators:					
□	Other (explain)		data from WF	RCC (2006)	Primary Indica						
Typical length:	130	Days	5% =	6.5 days		Inundat	ed				
, , , , , , , , , , , , , , , , , , ,		1	- 7.5		†	=	ed Upper 12 I	nches			
Recorded Data (describe t	velow).					Water N		1101100			
Trecorded Bala (describe l	Stream, Lake, or Ti	ido Caugo				Drift Lin					
		•									
	Aerial Photographs					_	nt Deposits	M/- tl l-			
	Other					Drainag	e Patterns in	vvetiands			
	None Available				4						
Field Observations:					Secondary Inc	dicators (2 or more i					
Depth of Sur		none	inches			=		es in Upper 12 I	nches		
· ·	nding Water in Pit:	>18	inches				Stained Leave				
Depth to Sat	urated Soil:	>18	inches			_	oil Survey Da	ta			
							eutral Test explain below)			
Wetland Hydrology F	Present?		✓ YES	NO		Outer (t	p.a bolow	,			
Remarks:											
2											

11/1/2006 DP-5

eou e

50IL5								P	lot ID: DP-	5	
Map Unit Name (se	ries and ph	nase):	Jabu stony sandy loa	m, mod. fine subs	soil, variant	2-9% slopes	Drainage Class:	Well-drained			
Taxonomy (subgroup): Ultic Haploxeralfs			eralfs	Field observat			ons confirm mappe	d type?	✓ YES	NO	
Is data point located within a hydric inclusion? ☐ YES ☑ NO											
Profile Description		, 3110 11101031	····								
		1				Re	edoximorphic Featu	res			
						1		-	†		
De	epth			Matrix Co	olor	Abundance,					
Horizon (inc	ches)	Texture	Structure	(moist)	Size, Contrast	Type, location	Color (moist)		Other	
	0-4	sil		10YR 3		none					
4	-18	sl		10YR 4	./4	c,3,p	Fe-x, mat	5YR 3/4			
Hydric Soil Indicato	rs (check a	all that apply	r):								
		Histosol	,			Mn or Fe	Concretions or Nod	ules			
		Histic Epiped	don			High Organic Content in Surface Layer of Sandy Soils					
	Sulfidic Odor						treaking in Sandy S	Soils			
		Aquic Moistu	•				National/Local Hydi	ic Soils List			
	_	•	onditions (α , α -			✓ Other (exp.)	olain below)				
	=		ow-Chroma (<u><</u> 1) ma								
		Matrix Chror	na <2 with Redoxin		trations ar	nd/or Depletions	8				
Hydric Soils Pre	esent?			✓ YES	Пио						
WETLAND DETE	RMINATI	ION :									
Hydrophytic veget	tation prese	ent?		✓ YES [NO						
Wetland hydrology	y present?			✓ YES	NO						
Hydric soils present?				✓ YES	NO	Is the sampling	ng point within a	vetland?	✓ YES	NO	
Remarks: Data point is	located w	ithin a sed	iment catchment	basin with an	input (cu	llvert) and out	put (overflow drai	n).			
Texture and Rock Fragment Content							Redoximorphic Feature Morphology				
Texture		fel - von: fir -	sandy loom	Rock Fragments	s	Abundance f - few	e	Type	noontratic:	(soft mass)	
cos - coarse sand s - sand		fsl - very fine - loam	sanuy idalii	gr - gravelly vgr - very gravell	у	c - commor	1	Fe-x - iron co		,	
s - fine sand		il - silt loam		xgr - extremely g		m - many				entration (soft mass)	
vfs - very fine sand		i - silt	u la am	cb - cobbly		C!			ganese noo	lule or concretion	
lcos - loamy coarse sa ls - loamy sand		cl - sandy cla d - clay loam	•	vcb - very cobbly xcb - extremely c		Size 1 - fine (<2r	mm)	d - depletion			
Ifs - loamy fine sand		icl - silty clay		st - stony	Jobbiy	2 - medium	,	Location			

lvfs - loamy very fine sand cosl - coarse sandy loam sl - sandy loam fsl - fine sandy loam sc - sandy clay sic - silty clay vst - very stony xst - extremely stony c - clay

3 - coarse (5–20mm) 4 - very coarse (20–76mm)

5 - extremely coarse (>76mm)

Contrast f - faint

d - distinct

p - prominent

DP-5

mat - soil matrix ped - ped surface por - soil pores otr - other

11/1/2006



Jones & Stokes DATA FORM ROUTINE WETLAND DETERMINATION										
Project/Site: Applicant/Owner: Investigator(s):	Kings Beach Com Placer County De C. Voigt, J. Cook 09/19/06	epartment of			State: County: S/T/R	California Placer 19/16N/18E				
Date: Do normal circumstances Is the site significantly dis Is the area a potential pro (If needed, explain below	YES YES	□ NO ☑ NO ☑ NO	Community ID: Transect ID: Plot ID:	Ponderosa pine woodland DW-2 DP-6						
VEGETATION Dominant Plant Species Strata % Rel. Cover Indicator Associate Plant Species Strata % Rel. Cover Indicator Strata % Rel. Cover % Re										
Grindelia camporum		Н	30	FACU	Aster eatonii		Н	10	FAC	
Melica fugax		Н	30	NL						
Aira caryophyllea		Н	30	NL						
		ļ								
Percent of dominants tha	t are OBL, FACW, or	FAC (exclud	ing FAC-):		Total veg	etation cover	75	%		
Physiologica Visual Obse	cal Adaptations al/Reproductive Adap ervation of Plant Spec ed Inundation/Saturat	cies Growing i	in Areas of	Personal Knowledge of Regional Plant Communities Technical Literature Other (explain below)						
Hydrophytic Veget	ation Present?		YES							
Remarks:										
HYDROLOGY										
Is it the growing season?	YES	✓ NO								
Based On:	Soil Temp (record)				Wetland Hydrold	gy Indicators:				
✓	Other (explain)		data from WR	CC (2006)	Primary Indica	ators:				
Typical length: 130 Days 5% = 6.5 days					Inundated Saturated Upper 12 Inches					
Recorded Data (describe	below):				Water M	Marks				

Is it the growing season?	HYDROLOGY										
Other (explain) Typical length: 130	Is it the growing seas	son?	YES	✓ NO							
Typical length: 130	Based On:		Soil Temp (record)				Wetland Hydrology Indicators:				
Recorded Data (describe below): Saturated Upper 12 Inches	✓		Other (explain)		data from WRCC (2006)		Primary Indicators:				
Recorded Data (describe below): Stream, Lake, or Tide Gauge Aerial Photographs Other None Available Field Observations: Depth of Surface Water: Depth to Standing Water in Pit: Depth to Saturated Soil: Stream, Lake, or Tide Gauge Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Secondary Indicators (2 or more required): Water Marks Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (explain below)	Typical length:		130	Days	5% =	6.5 days			Inundated		
Stream, Lake, or Tide Gauge Aerial Photographs Other Other None Available Field Observations: Depth of Surface Water: Depth to Standing Water in Pit: Depth to Saturated Soil: Secondary Indicators (2 or more required): Oxidized Rhizospheres in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (explain below)									Saturated Upper 12 Inches		
Aerial Photographs Other Other None Available Field Observations: Depth of Surface Water: Depth to Standing Water in Pit: Depth to Saturated Soil: Secondary Indicators (2 or more required): Oxidized Rhizospheres in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (explain below)	Recorded Data (describe be		elow):						Water Marks		
Field Observations: Depth of Surface Water: Depth to Standing Water in Pit: Depth to Saturated Soil: Depth to Saturated Soil: Secondary Indicators (2 or more required): Oxidized Rhizospheres in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (explain below)	Stream, Lake, or Tide Gai			de Gauge					Drift Lines		
None Available Field Observations: Depth of Surface Water: Depth to Standing Water in Pit: Depth to Saturated Soil: None Available Secondary Indicators (2 or more required): Water-Stained Leaves Under Standing Water in Pit: Under Standing Wate	Aerial Photographs								Sediment Deposits		
Field Observations: Depth of Surface Water: Depth to Standing Water in Pit: Depth to Saturated Soil: Secondary Indicators (2 or more required): Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (explain below)			Other						Drainage Patterns in Wetlands		
Depth of Surface Water: Depth to Standing Water in Pit: Depth to Saturated Soil: Depth to Saturated Soil: Sinches Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (explain below)			None Available								
Depth to Standing Water in Pit: Depth to Saturated Soil: Inches Uater-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (explain below)	Field Observations:						Secondary Indicators (2 or more required):				
Depth to Saturated Soil: Soil Survey Data FAC-Neutral Test Other (explain below)	Depth	of Surf	face Water: none		inches				Oxidized Rhizospheres in Upper 12 Inches		
FAC-Neutral Test Other (explain below)			•	>12	inches						
Other (explain below)	Depth	to Satu	urated Soil:	>12	inches			Ц	•		
								H			
									Other (explain below)		
wetianu nyurology Present?	Wetland Hydrol	logy P	resent?		YES	✓ NO					
Remarks:	Remarks:										

11/1/2006 DP-6 SOILS Plot ID: DP-6

00120									IOU ID. DI	
Map Unit Na	ame (series and	phase):	Jabu stony sandy loa	am, mod. fine s	subsoil, variar	nt, 2-9% slopes	Drainage Class:	Well-drained		
Taxonomy (s	subgroup):	Ultic Haplox	ceralfs			Field observations confirm mapped type?				
Is data point	located within a	hydric inclus	sion?	YES [✓ NO					
Profile Desc		, ,								
						Re	edoximorphic Featu	ires		
									Ī	
	Depth			Matrix	Color	Abundance,				
Horizon	(inches)	Texture	Structure		oist)	Size, Contrast	Type, location	Color (moist)		Other
	0-12	grsl		7.5Y	R 4/4	none				
Hydric Soil I	ndicators (chec	k all that app	ly):							
		Histosol				Mn or Fe	Concretions or Noc	dules		
		Histic Epipe	edon			High Orga	anic Content in Sur	face Layer of Sa	andy Soils	
		Sulfidic Odd					Streaking in Sandy			
		-	ure Regime	P			National/Local Hyd	ric Soils List		
			conditions (α , α 's ow-Chroma (\leq 1) m		it)	✓ Other (exp	plain below)			
	H	-	ma <u><</u> 2 with Redoxi		centrations	and/or Depletion	ne			
Hydria Sa	oils Present?	WIGHTA OTHO	ma <u>s</u> z wim redoxii	YES	✓ NO	апа/от Веріскої	13			
Remarks:										
		oth of 12" c	lue to gravel and	cobbles.						
WETLAND	DETERMINA	TION:								
Hydrophyti	ic vegetation pre	esent?		YES	✓ NO					
Wetland hy	ydrology presen	it?		YES	✓ NO					
Hydric soils				YES	✓ NO	Is the sampling	ng point within a	wetland?	YES	✓ NO
Remarks:	•									
	Textur	e and Roc	k Fragment Cont	tent			Redoximo	rphic Feature	Morphol	oav
Texture	TOATUI			Rock Fragm	ents	Abundanc		Туре		- 97
cos - coarse sa	and	vfsl - very fine	e sandy loam	gr - gravelly		f - few	-	Fe-x - iron c	oncentration	(soft mass)
s - sand		I - loam	-	vgr - very gra		c - commor	n	Fe-nc - iron	nodule or co	oncretion
fs - fine sand vfs - very fine s	sand	sil - silt loam si - silt		xgr - extreme cb - cobbly	ly gravelly	m - many				entration (soft mass)
lcos - loamy co		scl - sandy cl	ay loam	vcb - very col	obly	Size		d - depletion	-	IGIO OF CONTOURNING
ls - loamy sand	d	cl - clay loam	1	xcb - extreme		1 - fine (<2	,			
Ifs - loamy fine	e sand	sicl - silty clay	y ioam	st - stony		2 - medium	ı ∠–5mm)	Location		

lvfs - loamy very fine sand cosl - coarse sandy loam sl - sandy loam fsl - fine sandy loam sc - sandy clay sic - silty clay vst - very stony xst - extremely stony c - clay

3 - coarse (5–20mm) 4 - very coarse (20–76mm) 5 - extremely coarse (>76mm)

Contrast f - faint d - distinct

p - prominent

mat - soil matrix ped - ped surface por - soil pores otr - other

DP-6

11/1/2006



DATA FORM

jories	COLOR	ics		ROUTINE W	ETLAND DE	ETERMINATION					
Project/Site: Kings Beach Con		nmercial Co	re Improveme	nt Project	State: California						
Applicant/Owne	er:	Placer County De	partment of	f Public Works	1	County:	Placer				
Investigator(s):		C. Voigt, J. Cook				S/T/R	19/16N/18E				
Date:		09/20/06									
Do normal circ	umstances	exist on the site?		✓ YES	□ NO	Community ID:	Depressional W	etland			
0	,	urbed (atypical situat	ion)?	YES	✓ NO	Transect ID:	DW-4				
Is the area a po				YES	✓ NO	Plot ID:	DP-7				
(If needed, ex	xplain belov	N)									
VEGETATI	ON										
Dominant Pla	nt Species		Strata	% Rel. Cover	Indicator	Associate Plant	t Species	Strata	% Rel. Cover	Indicator	
Juncus balticus			Н	35	OBL						
Eleocharis paud	ciflora		Н	20	OBL						
Leymus triticoid			Н	25	FAC+						
Aira caryophylle			Н	20	NL						
,,,,				-							
Decreed of dec		ODI FAOM	EAO /ll	E	750/	1	Tatalasas	-1-1:	00	0/	
Percent of don	ninants tha	t are OBL, FACW, or	FAC (exclud	ling FAC-):	75%		_ rotar veg	etation cover	60	%	
Morphological Adaptations Physiological/Reproductive Adaptations Visual Observation of Plant Species Growing in Areas of Prolonged Inundation/Saturation Hydrophytic Vegetation Present?						Personal Knowledge of Regional Plant Communities Technical Literature Other (explain below)					
Remarks:	no vegen	ation i resent:									
HYDROLO	GY										
Is it the growing	season?	YES	✓ NO								
Based On:		Soil Temp (record)				Wetland Hydrol	nay Indicators:				
	$\overline{\checkmark}$	Other (explain)		data from WF	PCC (2006)	Primary Indic					
Typical length:			Days	5% =	6.5 days	1 minary maio	Inundat	od			
Typical leligill.		130	Days	370 =	0.5 days	-			nohoo		
D	/ d = = = = !!= = 1	h - l					_	ed Upper 12 I	ncnes		
Recorded Data	(describe)	•					Water N				
		Stream, Lake, or Tid	de Gauge				Drift Lin				
	<u></u>	Aerial Photographs						nt Deposits			
		Other					✓ Drainag	je Patterns in	Wetlands		
		None Available									
Field Observati	ions:					Secondary Inc	dicators (2 or more i	reauired):			
С	Depth of Su	rface Water:	none	inches					es in Upper 12 I	nches	
	•	anding Water in Pit:	>12	inches				Stained Leave			
	-	turated Soil:	>12	inches				oil Survey Da			
	•	•		-			FAC-Ne	eutral Test			
							Other (e	explain below)		
Wetland Hy	drology l	Present?		✓ YES	NO						
Remarks:											

11/1/2006 DP-7

SOLLS Plot ID: DP-7

JUILS								P	IOT ID: DP-1
Map Unit Nam	ne (series and p	ohase):	Jabu stony sandy loa	m, mod. fine subs	oil, variant	, 2-9% slopes	Drainage Class:	_	
Taxonomy (sul	bgroup):	Ultic Haplox	eralfs			Field observation	ons confirm mappe	d type?	✓ YES NO
Is data point lo	cated within a	hydric inclus	ion?	YES V	NO				
Profile Descrip	otion								
						Re	edoximorphic Featu	ires	
Horizon	Depth (inches)	Texture	Structure	Matrix Co (moist		Abundance, Size, Contrast	Type, location	Color (moist)	Other
	0-1	sil		10YR 3	,	none			
	1-12	vgrsl		10YR 3	10YR 3/3				
Hydric Soil Inc	dicators (check	all that appl	y):						
ı		Histosol					Concretions or Nod		
		Histic Epipe					inic Content in Surfa	-	ndy Soils
		Sulfidic Odd					treaking in Sandy S National/Local Hydr		
		Aquic Moist Reducing C	onditions (α , α -	dinvridul teet)			national/Local Hydr blain below)	IIO JUIIS LISI	
			ow-Chroma (<u><</u> 1) ma			- Calci (exp	Jan Dolow)		
		Matrix Chro	ma <u><</u> 2 with Redoxin	norphic Concent	trations a	nd/or Depletions	S		
Hydric Soil	s Present?			✓ YES	NO				
Remarks:									
WETLAND D	DETERMINAT	ΓΙΟN :							
Hydrophytic	vegetation pre	sent?		✓ YES [NO				
Wetland hyd	rology present	?		✓ YES [NO				
Hydric soils	present?			✓ YES	NO	Is the samplir	ng point within a v	wetland?	✓ YES NO
	nt is located v		iment detention b	asin with an in	nput (culv	vert) at the nor	th end of the bas	in and an outp	ut (overflow drain) at the
	Textur	e and Roc	k Fragment Cont					rphic Feature	Morphology
Texture				Rock Fragments	s	Abundance	e	Туре	
cos - coarse san s - sand		vfsl - very fine I - loam	e sandy loam	gr - gravelly vgr - very gravell	v	f - few c - commor	1		oncentration (soft mass) nodule or concretion
fs - fine sand		sil - silt loam		xgr - extremely g	-	m - many			anese concentration (soft mass)
vfs - very fine sa		si - silt	av loam	cb - cobbly	,	Size		Mn-nc - man d - depletion	ganese nodule or concretion
lcos - loamy coarse sand scl - sandy clay loam vcb - very cobbly Size								u - depietion	

ls - loamy sand cl - clay loam xcb - extremely cobbly Ifs - loamy fine sand sicl - silty clay loam st - stony lvfs - loamy very fine sand sc - sandy clay vst - very stony cosl - coarse sandy loam sic - silty clay xst - extremely stony sl - sandy loam c - clay fsl - fine sandy loam

1 - fine (<2mm) 2 - medium 2-5mm) 3 - coarse (5–20mm) 4 - very coarse (20–76mm)

5 - extremely coarse (>76mm)

Contrast f - faint

d - distinct

p - prominent

Location mat - soil matrix ped - ped surface

por - soil pores otr - other

11/1/2006 DP-7



DATA FORM ROUTINE WETLAND DETERMINATION

,				NOOTHIL V	TETER (NO DE	-1-111111111111111111111111111111111111					
Project/Site: Kings Beach Com			nmercial Co	re Improveme	nt Project	State:	California				
Applicant/Owne	r: I	Placer County De	epartment o	f Public Works	i	County:	Placer				
Investigator(s):	_	C. Voigt, J. Cook				S/T/R	19/16N/18E				
Date:	_	09/20/06									
Do normal circu				✓ YES	NO	Community ID:	VID: Ruderal				
Is the site signif	ficantly distur	rbed (atypical situat	tion)?	YES	✓ NO	Transect ID:	DW-4				
Is the area a po	-			YES	✓ NO	Plot ID:	DP-8				
(If needed, ex	xplain below)	ı									
VEGETATION	ON										
Dominant Plant Species			Strata	% Rel. Cover	Indicator	Associate Plant	Species	Strata	% Rel. Cover	Indicator	
Elytrigia repens			Н	100	NI*						
		051 51011	=+0/							0/	
Percent of don	ninants that a	are OBL, FACW, or	FAC (exclud	ling FAC-):	0%		Total veg	etation cover	75	%	
		l Adaptations					Personal Knowled	ge of Regiona	al Plant Commu	nities	
		Reproductive Adap					Technical Literatur	re .			
□ v	isual Observ	ation of Plant Spec	ies Growing	in Areas of			Other (explain below	ow)			
	Prolonged	I Inundation/Saturat	tion								
Hydrophy	tic Vegetat	ion Present?		YES	✓ NO						
Remarks:											
Remarks.											
HYDROLO	GY										
Is it the growing	season?	YES	✓ NO								
Based On:		Soil Temp (record)				Wetland Hydrolo	ogy Indicators:				
		Other (explain)		data from WR	CC (2006)	Primary Indica					
Typical length:			Dava	5% =	` ,	1 minary maiot	Inundat	od			
i ypicai ierigiii.	_	130	Days	376 -	6.5 days						
								ed Upper 12 I	ncnes		
Recorded Data	· —	•					Water N				
		Stream, Lake, or Tid	-				Drift Lin	es			
	V	Aerial Photographs					Sedime	nt Deposits			
		Other					Drainag	e Patterns in	Wetlands		
		None Available									
Field Observati	ione:					Secondary Ind	licators (2 or more i	equired):			
		ace Water:	none	inches		Secondary ind		. ,	es in Upper 12 I	nchee	
Depth of Surface Water: Depth to Standing Water in Pit: none inches								Stained Leave		Tiches	
	epth to Stan	-	>10	inches				oil Survey Da			
	reptir to Satu	iated Soil.	>10	IIICIIES				eutral Test	ıa		
								explain below)		
Wetland Hydrology Present? YES NO								p.a bolow	,		
Remarks:											
Admarks.											

11/1/2006 DP-8

SOILS Plot ID: DP-8

JUILS								Р	וסנ וט: טף-	8
Map Unit Nam	e (series and	phase):	Jabu stony sandy loa	ım, mod. fine sı	ubsoil, variant	:, 2-9% slopes	Drainage Class:	Well-drained		
Taxonomy (sub	ogroup):	Ultic Haplox	eralfs			Field observati	ons confirm mappe	ed type?	✓ YES	NO
Is data point lo	cated within a	hydric inclus	ion?	YES -	/ NO					
Profile Descrip		,								
1						Re	edoximorphic Featu	ıres	1	
									Ī	
	Depth			Matrix		Abundance,				
Horizon	(inches)	Texture	Structure	(mo		Size, Contrast	Type, location	Color (moist)		Other
	0-10	xgrsl		10YR	(3/3	none				
Hydric Soil Ind	licators (check		y):							
		Histosol	don			_	Concretions or Noc		adu Caila	
		Histic Epipe Sulfidic Odd					anic Content in Surf streaking in Sandy \$	-	nuy Solls	
		Aquic Moist					National/Local Hyd			
			onditions (α , α -	dipyridyl test))		plain below)			
			ow-Chroma (<u><</u> 1) ma				•			
		Matrix Chro	ma <u><</u> 2 with Redoxin			nd/or Depletions	5			
Hydric Soil	s Present?			YES	✓ NO					
WETLAND D										
	vegetation pre			YES	✓ NO					
-	rology present	t?		YES	✓ NO				_	_
Hydric soils p	oresent?			YES	✓ NO	Is the sampling	ng point within a	wetland?	YES	✓ NO
Remarks:										
Texture	Textur	e and Roc	k Fragment Cont	Rock Fragme	nts	Abundanc		orphic Feature	Morpho	logy
cos - coarse san	d	vfsl - very fine	e sandy loam	gr - gravelly		f - few	-	Fe-x - iron co	oncentration	n (soft mass)
s - sand		I - loam		vgr - very grav		c - commor	า	Fe-nc - iron	nodule or co	oncretion
fs - fine sand vfs - very fine sar	nd	sil - silt loam si - silt		xgr - extremely cb - cobbly	y gravelly	m - many				centration (soft mass)
lcos - loamy coai		scl - sandy cl	•	vcb - very cob	•	Size		d - depletion		
Is - loamy sand Ifs - loamy fine sa	and	cl - clay loam sicl - silty clay		xcb - extremel st - stony	y cobbly	1 - fine (<2) 2 - medium	,	Location		
lvfs - loamy very	fine sand	sc - sandy clay		vst - very ston	у	3 - coarse (,	mat - soil ma	atrix	
cosl - coarse san	cosl - coarse sandy loam sic - silty clay xst - extremely stony			xst - extremely	stony	4 - very coarse (20–76mm) ped - ped surface				

p - prominent

Contrast f - faint d - distinct

5 - extremely coarse (>76mm)

mat - soil matrix ped - ped surface por - soil pores otr - other

11/1/2006 DP-8

c - clay

sl - sandy loam fsl - fine sandy loam

Appendix B Species List

Appendix B. Plant Species Observed in Delineation Study Area

Scientific Name	Common Name	Indicator Status ^a
Abies concolor	White fir	NI
Aira caryophyllea	Silver hairgrass	NI
Alnus incana ssp. tenuifolia	Mountain alder	NI
Arrhenatherum elatius	Tall oatgrass	FACU
Arctostaphylos sp.	Manzanita	NA
Artemisia douglasiana	Mugwort	FACW
Aster eatonii	Eaton's aster	FAC
Calocedrus decurrens	Incense cedar	NI
Carex amplifolia	Big-leaf sedge	OBL
Cornus sericea ssp. sericea [Cornus stolonifera]	American dogwood	FACW
Dactylis glomerata	Orchard grass	FACU
Deschampsia danthonioides	Annual hairgrass	FACW
Eleocharis pauciflora	Fewflower spikerush	OBL
Elymus elymoides [Sitanion hystrix]	Squirreltail	FACU-
Elymus lanceolatus ssp. lanceolatus [Agropyron dasystachyum]	Thickspike wheatgrass	NI
Elytrigia repens [Agropyron repens]	Quackgrass	NI
Equisetum hymemale	Common scouring rush	FACW
Grindelia camporum	Common gumplant	FACU
Juncus balticus	Baltic rush	OBL
Juncus macrandus	Long-anthered rush	OBL
Juncus mexicanus	Mexican rush	FACW
Juncus xiphioides	Iris-leaved rush	OBL
Lepidium campestre	English pepper grass	NI
Leymus triticoides [Elymus triticoides]	Creeping wild-rye	FAC+
Lotus corniculatus	Birdsfoot trefoil	FAC
Lupinus latifolius	Broad-leaf lupine	NI
Melica fugax	Small oniongrass	NI
Pinus jeffreyi	Jeffrey pine	NI
Pinus ponderosa	Ponderosa pine	FACU
Polygonum douglasii	Douglas' knotweed	FACU
Populus balsamifera ssp. trichocarpa	Black cottonwood	FACW
Populus tremuloides [Populus tremula]	Quaking aspen	FAC+
Rosa woodsii var. ultramontana	Mountain Rose	FAC-
Rubus parviflorus	Thimbleberry	FAC+
Salix lucida var. lasiandra	Pacific willow	NI
Salix lutea	Yellow willow	OBL
Scirpus americanus	American bulrush	OBL
Scirpus microcarpus	Small-fruited bulrush	OBL
Tanacetum vulgare a Watland indicator status obtained from Reed (1988)	Common tansy	NI

^a Wetland indicator status obtained from Reed (1988).

Appendix C Representative Photographs



Depressional Wetland #1



Depressional Wetland #2

06676.06 001 (10/06)



Depressional Wetland #3



Depressional Wetland #4

06676.06 001 (10/06)



Depressional Wetland #5



Depressional Wetland #6

06676.06 001 (10/06)



Depressional Wetland #7



Intermittent Drainage Photo #1



Intermittent Drainage Photo #2

06676.06 004 (10/06)



Intermittent Drainage Photo #3



Intermittent Drainage Photo #4

06676.06 004 (10/06)



SP-1a Griff Creek



SP-1b Griff Creek



SP-1b Oxbow Bend

U.S. Army Corps of Engineers Verification Letter



DEPARTMENT OF THE ARMY

U.S. ARMY ENGINEER DISTRICT, SACRAMENTO CORPS OF ENGINEERS 1325 J STREET SACRAMENTO, CALIFORNIA 95814-2922

REPLY TO

February 26, 2007

Regulatory Branch (200600998)

Dan LaPlante
Placer County Department of Public Works
Pioneer Commerce Center
10825 Pioneer Trail
Suite 105
Truckee, California 96161

Dear Mr. LaPlante:

We are responding to your consultant's request for an approved jurisdictional determination for the Kings Beach Commercial Core Improvement project. This approximately 74.8-acre site is located adjacent to Lake Tahoe in Sections 13 and 19 on the Kings Beach 7.5 minute USGS quadrangle, Placer County, California.

Based on available information, we concur with the estimate of waters of the United States, as depicted on the October 2006 maps ("Exhibit A", sheets 1, 2 and 3; enclosed) prepared by Jones and Stokes. Approximately 0.719 acres of waters of the United States, including wetlands, are present within the survey area. These waters are regulated under Section 404 of the Clean Water Act. In addition, Lake Tahoe is regulated under Section 10 of the Rivers and Harbors Act. Lake Tahoe is a navigable waterway and the other features are either tributary to the Lake, or adjacent to a tributary.

This verification is valid for five years from the date of this letter, unless new information warrants revision of the determination before the expiration date. This letter contains an approved jurisdictional determination for your subject site. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the South Pacific Division Office at the following address: Doug Pomeroy, Administrative Appeal Review Officer, Army Corps of Engineers, South Pacific Division, CESPD-PDS-O, 333 Market Street, Room 923, San Francisco, California 94105-2195, Telephone: 415-977-8035 FAX: 415-977-8129.

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the NAP. Should you decide to submit an RFA form, it must be received at the above address by May 21, 2007. It is not necessary to submit an RFA form to the Division Office if you do not object to the determination in this letter.

You should provide a copy of this letter and notice to all other affected parties, including any individual who has an identifiable and substantial legal interest in the property. s request.

Please refer to identification number 200600998 in any correspondence concerning this project. If you have any questions, please contact Ms. Kathleen Dadey at our Nevada Regulatory Office, C. Clifton Young Federal Building, 300 Booth Street, Room 2103, Reno, Nevada 89509-1361, email *kathleen.a.dadey@usace.army.mil*, or telephone 775-784-5305. You may also find additional information on our website: www.spk.usace.army.mil/regulatory.html.

Sincerely,

Ms. Kathleen Dadey Acting Office Chief Reno Office

Enclosure(s)

Copy furnished without enclosure(s):

Scott Frazier, Jones & Stokes, 2600 V Street, Sacramento, California 95818-1914

Mary Fiore-Wagner, California Regional Water Quality Control Board, Lahontan Region,
2501 Lake Tahoe Boulevard, South Lake Tahoe, California 96150-7747

Tobi Tyler, California Regional Water Quality Control Board, Lahontan Region, 2501 Lake Tahoe Blvd., South Lake Tahoe, California 96150-7747

U.S. Fish and Wildlife Service, Wetlands Branch, 2800 Cottage Way, Suite W2605, Sacramento, California 95825-3901

U.S. Fish and Wildlife Service, Endangered Species Division, 2800 Cottage Way, Suite W2605, Sacramento, California 95825-3901

Mary Hays, California State Lands Commission, 100 Howe Ave., Ste. 100 South, Sacramento, California 95825-8202